CLAIMS

1. Nano-scale carbon tubes each containing a main framework which comprises carbon, and each having a diameter of 0.1 to 1000 nm and an amorphous structure.

2. The nano-scale carbon tubes according to claim 1, each of which comprises hexagonal carbon layers each having a dimension in a planar direction that is smaller than the diameter of the carbon tube, as determined from a transmission electron microscope image.

3. The nano-scale carbon tubes according to claim 1 or 2, each of which has an interlayer spacing (002) between hexagonal carbon layers of at least 3.54 Å, a diffraction angle (2θ) of 25.1 degrees or less, and a 2θ band half-width of at least 3.2 degrees, as determined with a diffractometer by an X-ray diffraction method (incident X-ray: CuKα).

4. The amorphous nano-scale carbon tubes according to any one of claims 1 to 3, each of which has a straight shape.

5. The amorphous nano-scale carbon tubes according to any one of claims 1 to 4, each of which has a hollow cylindrical shape or a hollow rectangular prism shape.

6. The amorphous nano-scale carbon tubes according to any one of claims 1 to 5, each of which has